

**CHILD-SPECIFIC EXPOSURE FACTORS HANDBOOK**

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## TABLE OF CONTENTS

1. INTRODUCTION .....	1-1
1.1 BACKGROUND .....	1-1
1.2 PURPOSE .....	1-3
1.3 INTENDED AUDIENCE .....	1-3
1.4 SELECTION OF STUDIES FOR THE HANDBOOK .....	1-4
1.5 APPROACH USED TO DEVELOP RECOMMENDATIONS FOR EXPOSURE FACTORS .....	1-6
1.6 CHARACTERIZING VARIABILITY .....	1-7
1.7 USING THE HANDBOOK IN AN EXPOSURE ASSESSMENT .....	1-10
1.7.1 General Equation for Calculating Dose .....	1-11
1.8 FUTURE OR ON-GOING WORK .....	1-15
1.9 RESEARCH NEEDS .....	1-16
1.10 ORGANIZATION .....	1-17
1.11 REFERENCES FOR CHAPTER 1 .....	1-19
2. BREAST MILK INTAKE .....	2-1
2.1 INTRODUCTION .....	2-1
2.2 STUDIES ON BREAST MILK INTAKE .....	2-2
2.3 STUDIES ON LIPID CONTENT AND FAT INTAKE FROM BREAST MILK .....	2-5
2.4 OTHER FACTORS .....	2-7
2.5 RECOMMENDATIONS .....	2-8
2.6 REFERENCES FOR CHAPTER 2 .....	2-10
3. FOOD INTAKE .....	3-1
3.1 INTRODUCTION .....	3-1
3.2 INTAKE RATE DISTRIBUTIONS FOR VARIOUS FOOD TYPES .....	3-3
3.3 FISH INTAKE RATES .....	3-6
3.3.1 General Population Studies .....	3-6
3.3.2 Freshwater Recreational Study .....	3-12
3.3.3 Native American Subsistence Study .....	3-14
3.4 FAT INTAKE .....	3-15
3.5 TOTAL DIETARY INTAKE AND CONTRIBUTIONS TO DIETARY INTAKE .....	3-17
3.6 INTAKE OF HOME-PRODUCED FOODS .....	3-18
3.7 SERVING SIZE STUDY BASED ON THE USDA NFCS .....	3-23
3.8 CONVERSION BETWEEN AS CONSUMED AND DRY WEIGHT INTAKE RATES .....	3-23
3.9 FAT CONTENT OF MEAT AND DAIRY PRODUCTS .....	3-24

## TABLE OF CONTENTS (Continued)

3.10	RECOMMENDATIONS .....	3-25
3.11	REFERENCES FOR CHAPTER 3 .....	3-27
APPENDIX 3A	Calculations Used in the 1994-96 CSFII Analysis to Correct for Mixtures	
APPENDIX 3B	Food Codes and Definitions Used in Analysis of the 1994-96 Usda CSFII Data	
APPENDIX 3C	Sample Calculation of Mean Daily Fat Intake Based On cdc (1994) Data	
APPENDIX 3D	Food Codes and Definitions Used in Analysis of the 1987-88 USDA NFCS Data	
4.	DRINKING WATER INTAKE .....	4-1
4.1	INTRODUCTION .....	4-1
4.2	DRINKING WATER INTAKE STUDIES .....	4-2
4.3.	PREGNANT AND LACTATING WOMEN .....	4-7
4.4	RECOMMENDATIONS .....	4-8
4.4	REFERENCES FOR CHAPTER 4 .....	4-9
5.	SOIL INGESTION AND PICA .....	5-1
5.1	INTRODUCTION .....	5-1
5.2	SOIL INTAKE STUDIES .....	5-1
5.3	PREVALENCE OF PICA .....	5-18
5.4	DELIBERATE SOIL INGESTION AMONG CHILDREN .....	5-19
5.5	RECOMMENDATIONS .....	5-25
5.6	REFERENCES FOR CHAPTER 5 .....	5-27
6.	OTHER NON-DIETARY INGESTION FACTORS .....	6-1
6.1	INTRODUCTION .....	6-1
6.2	STUDIES RELATED TO NON-DIETARY INGESTION .....	6-2
6.3	RECOMMENDATIONS .....	6-9
6.4	REFERENCES FOR CHAPTER 6 .....	6-11
7.	INHALATION ROUTE .....	7-1
7.1	INTRODUCTION .....	7-1
7.2	INHALATION RATE STUDIES .....	7-1
7.3	RECOMMENDATIONS .....	7-7
7.4	REFERENCES FOR CHAPTER 7 .....	7-9
APPENDIX 7A	Ventilation Data .....	7A-1

## TABLE OF CONTENTS (Continued)

8. DERMAL ROUTE .....	8-1
8.1 INTRODUCTION .....	8-1
8.2 SURFACE AREA .....	8-2
8.2.1 Background .....	8-2
8.2.2 Measurement Techniques .....	8-2
8.2.3 Body Surface Area Studies .....	8-3
8.2.4 Application of Body Surface Area Data .....	8-7
8.3 SOIL ADHERENCE TO SKIN .....	8-8
8.3.1 Background .....	8-8
8.3.2 Soil Adherence to Skin Studies .....	8-9
8.4 RECOMMENDATIONS .....	8-12
8.4.1 Body Surface Area .....	8-12
8.4.2 Soil Adherence to Skin .....	8-13
8.5 REFERENCES FOR CHAPTER 8 .....	8-15
APPENDIX 8A      Formulae for Total Body Surface Area	
9. ACTIVITY FACTORS .....	9-1
9.1 INTRODUCTION .....	9-1
9.2 ACTIVITY PATTERNS .....	9-1
9.3 RECOMMENDATIONS .....	9-11
9.3.1 Recommendations for Activity Patterns .....	9-11
9.3.2 Summary of Recommended Activity Factors .....	9-13
9.4 REFERENCES FOR CHAPTER 9 .....	9-14
10. CONSUMER PRODUCTS .....	10-1
10.1 BACKGROUND .....	10-1
10.2 CONSUMER PRODUCTS USE STUDIES .....	10-1
10.3 RECOMMENDATIONS .....	10-2
10.4 REFERENCES FOR CHAPTER 10 .....	10-3
11. BODY WEIGHT STUDIES .....	11-1
11.1 INTRODUCTION .....	11-1
11.2 BODY WEIGHT STUDIES .....	11-1
11.3 RECOMMENDATIONS .....	11-3
11.4 REFERENCES FOR CHAPTER 11 .....	11-5

## TABLE OF CONTENTS (Continued)

12. LIFETIME .....	12-1
12.1 INTRODUCTION .....	12-1
12.2 DATA ON LIFETIME .....	12-1
12.3 RECOMMENDATIONS .....	12-2
12.4 REFERENCES FOR CHAPTER 12 .....	12-3

## LIST OF TABLES

Table 1-1. Considerations Used to Rate Confidence in recommended Values . . . . .	1-21
Table 1-2. Summary of Exposure Factor Recommendations and Confidence Ratings . . . . .	1-22
Table 1-3. Characterization of Variability in Exposure Factors . . . . .	1-24
Table 2-1. Daily Intakes of Breast Milk . . . . .	2-11
Table 2-2. Breast Milk Intake for Infants Aged 1 to 6 Months . . . . .	2-11
Table 2-3. Breast Milk Intake among Exclusively Breast-fed Infants During the First 4 Months of Life . . . . .	2-12
Table 2-4. Breast Milk Intake During a 24-hour Period . . . . .	2-13
Table 2-5. Breast Milk Intake Estimated by the Darling Study . . . . .	2-14
Table 2-6. Lipid Content of Human Milk and Estimated Lipid Intake among Exclusively Breast-fed Infants . . . . .	2-14
Table 2-7. Predicted Lipid Intakes for Breast-fed Infants under 12 Months of Age . . . . .	2-14
Table 2-8. Number of Meals per Day . . . . .	2-15
Table 2-9. Percentage of Mothers Breast-feeding Newborn Infants in the Hospital and Infants at 5 or 6 Months Of Age in the United States in 1989 <sup>a</sup> , by Ethnic Background and Selected Demographic Variables . . . . .	2-16
Table 2-10. Confidence in Breast Milk Intake Recommendations . . . . .	2-17
Table 2-11. Breast Milk Intake Rates Derived from Key Studies . . . . .	2-18
Table 2-12. Summary of Recommended Breast Milk And Lipid Intake Rates . . . . .	2-19
Table 3-1. Weighted and Unweighted Number of Observations, 1994/96 CSFII Analysis . .	3-29
Table 3-2. Per Capita Intake of the Major Food Groups (g/kg-day as consumed) . . . . .	3-30
Table 3-3. Per Capita Intake of Individual Foods (g/kg-day as consumed) . . . . .	3-31
Table 3-4. Per Capita Intake of USDA Categories of Vegetables and Fruits (g/kg-day as consumed) . . . . .	3-33
Table 3-5. Per Capita Intake of Exposed/Protected Fruit and Vegetable Categories (g/kg-day as consumed) . . . . .	3-34
Table 3-6. Per Capita Distribution of Fish (Finfish and Shellfish) Intake by Age and Gender - As Consumed . . . . .	3-35
Table 3-7. Consumers Only Distribution of Fish (Finfish and Shellfish) Intake by Age and Gender - As Consumed . . . . .	3-36
Table 3-8. Per Capita Distribution of Fish (Finfish and Shellfish) Intake by Age and Gender - Uncooked Fish Weight . . . . .	3-37
Table 3-9. Per Capita Distribution of Fish (Finfish and Shellfish) Intake by Age and Gender - Uncooked Fish Weight . . . . .	3-38
Table 3-10. Mean and 95th Percentile of Fish Consumption (g/day) by Sex and Age . . . . .	3-39
Table 3-11. Best Fits of Lognormal Distributions Using the Nonlinear Optimization (Nlo) Method . . . . .	3-40

## LIST OF TABLES (Continued)

Table 3-12. Number of Respondents Reporting Consumption of a Specified Number of Servings of Seafood in 1 Month and Source of Seafood Eaten . . . . .	3-40
Table 3-13. Mean Fish Intake Among Individuals Who Eat Fish and Reside in Households With Recreational Fish Consumption . . . . .	3-41
Table 3-14. Children's 5 and Under Fish Consumption Rates - Throughout Year . . . . .	3-41
Table 3-15. Fat Intake Among Children Based on Data from the Bogalusa Heart Study, 1973-1982 (g/day) . . . . .	3-42
Table 3-16. Fat Intake Among Children Based on Data from the Bogalusa Heart Study, 1973-1982 (g/kg/day) . . . . .	3-43
Table 3-17. Mean Total Daily Dietary Fat Intake (g/day) Grouped by Age and Gender . . . .	3-44
Table 3-18. Per Capita Total Dietary Intake . . . . .	3-45
Table 3-19. Per Capita Intake of Major Food Groups (g/day, as consumed) . . . . .	3-46
Table 3-20. Per Capita Intake of Major Food Groups (g/kg/day, as consumed) . . . . .	3-48
Table 3-21. Per Capita Intake of Total Foods and Major Food Groups, and Percent of Total Food Intake for Individuals with Low-end, Mid-range, and High-end Total Food Intake . . . . .	3-50
Table 3-22. Per Capita Intake of Total Foods and Major Food Groups, and Percent of Total Food Intake for Individuals with Low-end, Mid-range, and High-end Total Meat Intake . . . . .	3-52
Table 3-23. Per Capita Intake of Total Foods and Major Food Groups, and Percent of Total Food Intake for Individuals with Low-end, Mid-range, and High-end Total Meat and Dairy Intake . . . . .	3-54
Table 3-24. Per Capita Intake of Total Foods and Major Food Groups, and Percent of Total Food Intake for Individuals with Low-end, Mid-range, and High-end Total Fish Intake . . . . .	3-56
Table 3-25. Per Capita Intake of Total Foods and Major Food Groups, and Percent of Total Food Intake for Individuals with Low-end, Mid-range, and High-end Total Fruit and Vegetable Intake . . . . .	3-58
Table 3-26. Per Capita Intake of Total Foods and Major Food Groups, and Percent of Total Food Intake for Individuals with Low-end, Mid-range, and High-end Total Dairy Intake . . . . .	3-60
Table 3-27. Weighted and Unweighted Number of Observations (Individuals) for NFCS Data Used in Analysis of Food Intake . . . . .	3-62
Table 3-28. Consumer Only Intake of Homegrown Foods (g/kg-day) <sup>a</sup> - All Regions Combined . . . . .	3-63
Table 3-29. Percent Weight Losses from Food Preparation . . . . .	3-64
Table 3-30. Quantity (as consumed) of Food Groups Consumed Per Eating Occasion and the Percentage of Individuals Using These Foods in Three Days . . . . .	3-65
Table 3-31. Mean Moisture Content of Selected Food Groups Expressed as Percentages of Edible Portions . . . . .	3-67
Table 3-32. Percent Moisture Content for Selected Fish Species . . . . .	3-71

## LIST OF TABLES (Continued)

Table 3-33. Percentage Lipid Content (Expressed as Percentages of 100 Grams of Edible Portions) of Selected Meat, Dairy, and Fish Products .....	3-74
Table 3-34. Fat Content of Meat Products .....	3-78
Table 3-35. Summary of Recommended Values for Per Capita Intake of Foods, As Consumed .....	3-79
Table 3-36. Confidence Intake Recommendations for Various Foods, Including Fish (General Population) .....	3-81
Table 3-37. Confidence Intake Recommendations for Fish Consumption - Recreational Freshwater Angler Population .....	3-82
Table 3-38. Confidence Intake Recommendations for Fish Consumption - Native American Subsistence Population .....	3-83
Table 4-1. Estimated Direct and Indirect Community Total Water Ingestion By Source for U.S. Population .....	4-10
Table 4-2. Estimate of Total Direct and Indirect Water Ingestion, All Sources By Broad Age Category for U.S. Children .....	4-11
Table 4-3. Estimate of Direct and Indirect Community Water Ingestion By Fine Age Category for U.S. Children .....	4-12
Table 4-4. Estimate of Direct and Indirect Community Water Ingestion By Broad Age Category for U.S. Children .....	4-13
Table 4-5. Estimate of Direct and Indirect Bottled Water Ingestion By Fine Age Category for U.S. Children .....	4-14
Table 4-6. Estimate of Direct and Indirect Bottled Water Ingestion By Broad Age Category for U.S. Children .....	4-15
Table 4-7. Estimate of Direct and Indirect Other Water Ingestion By Fine Age Category for U.S. Children .....	4-16
Table 4-8. Estimate of Direct and Indirect Other Water Ingestion By Broad Age Category for U.S. Children .....	4-17
Table 4-9. Chi-square GOF statistics for 12 Models, Tapwater Data, Based on Maximum Likelihood Method of Parameter Estimation .....	4-18
Table 4-10. P-Values for Chi-Square GOF Tests of 12 Models, Tapwater Data .....	4-18
Table 4-11. Results of Statistical Modeling of Tapwater Data (intake Rates in dL/kg-day) Using 5-Parameter Generalized F and 2-Parameter Gamma, Lognormal and Weibull Modles .....	4-19
Table 4-12. Total Fluid Intake of Women 15-49 Years Old .....	4-20
Table 4-13. Total Tapwater Intake of Women 15-49 Years Old .....	4-20
Table 4-14. Total Fluid (mL/Day) Derived from Various Dietary Sources by Women Aged 15-49 Years .....	4-21
Table 4-15. Summary of Recommended Community Drinking Water Intake Rates .....	4-22
Table 4-16. Confidence in Tapwater Intake Recommendations .....	4-23
Table 5-1. Estimated Daily Soil Ingestion Based on Aluminum, Silicon, and Titanium Concentrations .....	5-29

## LIST OF TABLES (Continued)

Table 5-2. Calculated Soil Ingestion by Nursery School Children .....	5-30
Table 5-3. Calculated Soil Ingestion by Hospitalized, Bedridden Children .....	5-31
Table 5-4. Mean and Standard Deviation Percentage Recovery of Eight Tracer Elements ..	5-31
Table 5-5. Soil and Dust Ingestion Estimates for Children Ages 1-4 Years .....	5-32
Table 5-6. Average Daily Soil Ingestion Values Based on Aluminum, Silicon, and Titanium as Tracer Elements .....	5-32
Table 5-7. Geometric Mean (Gm) and Standard Deviation (Gsd) Ltm Values for Children at Daycare Centers and Campgrounds .....	5-33
Table 5-8. Estimated Geometric Mean Ltm Values of Children Attending Daycare Centers According to Age, Weather Category, and Sampling Period .....	5-34
Table 5-9. Distribution of Average (Mean) Daily Soil Ingestion Estimates per Child for 64 Children (Mg/day) .....	5-35
Table 5-10. Estimated Distribution of Individual Mean Daily Soil Ingestion Based on Data for 64 Subjects Projected over 365 Days .....	5-35
Table 5-11. Estimated Soil Ingestion Rate Summary Statistics And Parameters for Distributions Using Binder et Al. (1986) Data with Actual Fecal Weights .....	5-36
Table 5-12. Positive/negative Error (Bias) in Soil Ingestion Estimates in the Calabrese et al. (1989) Mass-balance Study: Effect on Mean Soil Ingestion Estimate (Mg/day) ....	5-37
Table 5-13. Soil Ingestion Estimates for Median and Best Four Trace Elements Based on Food/Soil Ratios for 64 Anaconda Children (mg/day) Using Al, Si, Ti, Y, and Zr ...	5-38
Table 5-14. Dust Ingestion Estimates for Median and Best Four Trace Elements Based on Food/Soil Ratios for 64 Anaconda Children (mg/day) Using Al, Si, Ti, Y, and Zr	5-39
Table 5-15. Daily Soil Ingestion Estimation in a Soil-pica Child by Tracer and by Week (mg/day) .....	5-40
Table 5-16. Ratios of Soil, Dust, and Residual Fecal Samples in the Soil Pica Child .....	5-41
Table 5-17. Daily variation of Soil Ingestion by Children Displaying Soil Pica in Wong (1988) .....	5-42
Table 5-18. Prevalence of Non-Food Ingestion Mouthing Behaviors by Child's Age: Percent of Children Whose Parents Reports the Behavior in the Past Month .....	5-43
Table 5-19. Average Outdoor Object Mouthing Scores for Children by Age, Frequency of Sand/Dirt Play, and General Mouthing Quartiles .....	5-46
Table 5-20. Summary of Estimates of Soil Ingestion by Children .....	5-47
Table 5-21. Summary of Recommended Values for Soil Ingestion .....	5-47
Table 5-22. Confidence in Soil Intake Recommendation .....	5-48
Table 6-1. Extrapolated Total Mouthing Times Minutes per Day (time awake) .....	6-12
Table 6-2. Frequency of Contact, by Contact Variable Contacts per Hour .....	6-13
Table 6-3. Summary of Studies on Mouthing Behavior .....	6-14
Table 6-4. Summary of Mouthing Frequency Data .....	6-15
Table 6-5. Confidence in Mouthing Behavior Recommendations .....	6-16
Table 7-1. Calibration And Field Protocols For Self-monitoring of Activities Grouped by Subject Panels .....	7-10

## LIST OF TABLES (Continued)

Table 7-2. Subject Panel Inhalation Rates by Mean VR, Upper Percentiles, And Self-estimated Breathing Rates . . . . .	7-10
Table 7-3. Distribution of Predicted Intake Rates by Location And Activity Levels For Elementary And High School Students . . . . .	7-11
Table 7-4. Average Hours Spent Per Day in a Given Location and Activity Level For Elementary (EL) and High School (HS) Students . . . . .	7-11
Table 7-5. Distribution Patterns of Daily Inhalation Rates For Elementary (EL) And High School (HS) Students Grouped by Activity Level . . . . .	7-12
Table 7-6. Summary of Average Inhalation Rates (M <sup>3</sup> /hr) by Age Group And Activity Levels For Laboratory Protocols . . . . .	7-13
Table 7-7. Summary of Average Inhalation Rates (M <sup>3</sup> /hr) by Age Group And Activity Levels in Field Protocols . . . . .	7-14
Table 7-8. Comparisons of Estimated Basal Metabolic Rates (BMR) With Average Food-energy Intakes For Individuals Sampled in The 1977-78 NFCS . . . . .	7-15
Table 7-9. Daily Inhalation Rates Calculated From Food-energy Intakes . . . . .	7-16
Table 7-10. Daily Inhalation Rates Obtained From The Ratios Of Total Energy Expenditure to Basal Metabolic Rate (BMR) . . . . .	7-17
Table 7-11. Inhalation Rates For Short-term Exposures . . . . .	7-18
Table 7-12. Confidence in Inhalation Rate Recommendations . . . . .	7-19
Table 7-13. Summary of Recommended Values For Inhalation . . . . .	7-20
Table 7-14. Summary of Children's Inhalation Rates For Short-Term Exposure Studies . . .	7-21
Table 8-1. Total Body Surface Area of Male Children in Square Meters . . . . .	8-17
Table 8-2. Total Body Surface Area of Female Children in Square Meters . . . . .	8-18
Table 8-3. Percentage of Total Body Surface Area by Body Part For Children . . . . .	8-19
Table 8-4. Descriptive Statistics For Surface Area/body Weight (SA/BW) Ratios (m <sup>2</sup> /kg) . .	8-20
Table 8-5. Clothing choices and assumed body surface areas exposed . . . . .	8-21
Table 8-6. Estimated skin surface exposed during warm weather outdoor play for children under age 5 (based on SCS-I data). . . . .	8-21
Table 8-7. Number and percentage of respondents with children and those reporting outdoor play activities in both warm and cold weather . . . . .	8-22
Table 8-8. Play frequency and duration for all child players (from SCS-II data) . . . . .	8-22
Table 8-9. Hand washing and bathing frequency for all child players (from SCS-II data) . . .	8-23
Table 8-10. NHAPS and SCS-II play duration comparison . . . . .	8-23
Table 8-11. NHAPS and SCS-II hand wash frequency comparison . . . . .	8-24
Table 8-12. Summary of Field Studies . . . . .	8-25
Table 8-13. Geometric Mean And Geometric Standard Deviations of Soil Adherence by Activity And Body Region . . . . .	8-26
Table 8-14. Summary of Groups Assayed in Round 2 of Field Measurements . . . . .	8-27
Table 8-15. Attire for Individuals within Children's Groups Studied . . . . .	8-28

## LIST OF TABLES (Continued)

Table 8-16. Geometric Means (Geometric Standard Deviations) of Round 2 Post-activity Loadings . . . . .	8-29
Table 8-17. Summary of Controlled Green House Trials - Children Playing . . . . .	8-30
Table 8-18. Preactivity Loadings Recovered from Greenhouse Trial Children Volunteers . .	8-31
Table 8-19. Summary of Recommended Values For Skin Surface Area . . . . .	8-33
Table 8-20. Confidence in Body Surface Area Measurement Recommendations . . . . .	8-34
Table 8-21. Confidence in Soil Adherence to Skin Recommendations . . . . .	8-35
Table 9-1. Mean Time Spent (minutes) Performing Major Activities Grouped by Age, Sex and Type of Day . . . . .	9-15
Table 9-2. Mean Time Spent (minutes) in Major Activities Grouped by Type of Day for Five Different Age Groups . . . . .	9-16
Table 9-3. Mean Time Spent Indoors and Outdoors Grouped by Age and Day of the Week . . . . .	9-17
Table 9-4. Mean Time Spent at Three Locations for both CARB and National Studies (ages 12 years and older) . . . . .	9-18
Table 9-5. Mean Time Spent (minutes/day) in Various Microenvironments Grouped by Total Population and Gender (12 years and over) in the National and CARB Data . .	9-19
Table 9-6. Mean Time Spent (minutes/day) in Various Microenvironments by Type of Day for the California and National Surveys . . . . .	9-20
Table 9-7. Mean Time Spent (minutes/day) in Various Microenvironments by Age Groups for the National and California Surveys . . . . .	9-21
Table 9-8. Mean Time (minutes/day) Children Ages 12 Years and Under Spent in Ten Major Activity Categories for All Respondents . . . . .	9-22
Table 9-9. Mean Time Children Spent in Ten Major Activity Categories Grouped by Age and Gender . . . . .	9-23
Table 9-10. Mean Time Children Ages 12 Years and Under Spent in Ten Major Activity Categories Grouped by Seasons and Regions . . . . .	9-24
Table 9-11. Mean Time Children Ages 12 Years and Under Spent in Six Major Location Categories for All Respondents (minutes/day) . . . . .	9-25
Table 9-12. Mean Time Children Spent in Six Location Categories Grouped by Age and Gender . . . . .	9-25
Table 9-13. Mean Time Children Spent in Six Location Categories Grouped by Season and Region . . . . .	9-26
Table 9-14. Mean Time Children Spent in Proximity to Three Potential Exposures Grouped by All Respondents, Age, and Gender . . . . .	9-26
Table 9-15. Mean Time Spent Indoors and Outdoors Grouped by Age . . . . .	9-31
Table 9-16. Range of Recommended Defaults for Dermal Exposure Factors . . . . .	9-32
Table 9-17. Number of Times Taking a Shower at Specified Daily Frequencies by the Number of Respondents . . . . .	9-32

## LIST OF TABLES (Continued)

Table 9-18. Time (minutes) Spent Taking a Shower and Spent in the Shower Room After Taking a Shower by the Number of Respondents . . . . .	9-32
Table 9-19. Time (minutes) Spent Taking a Shower and Spent in the Shower Immediately After Showering . . . . .	9-33
Table 9-20. Total Time Spent Altogether in the Shower or Bathtub and Time Spent in the Bathroom Immediately After by Number of Respondents . . . . .	9-33
Table 9-21. Total Number of Minutes Spent Altogether in the Shower or Bathtub and Spent in the Bathroom Immediately Following a Shower or Bath . . . . .	9-34
Table 9-22. Range of Number of Times Washing the Hands at Specified Daily Frequencies by the Number of Respondents . . . . .	9-34
Table 9-23. Number of Minutes Spent Working or Being Near Excessive Dust in the Air (minutes/day) . . . . .	9-34
Table 9-24. Range of Number of Times per Day a Motor Vehicle was Started in a Garage or Carport and Started with the Garage Door Closed . . . . .	9-35
Table 9-25. Number of Minutes Spent Playing on Sand, Gravel, Dirt, or Grass . . . . .	9-35
Table 9-26. Number of Minutes Spent Playing in Sand, Gravel, Dirt or Grass (minutes/day) . . . . .	9-36
Table 9-27. Range of Number of Minutes Spent Playing on Grass in a Day by the Number of Respondents . . . . .	9-36
Table 9-28. Number of Minutes Spent Playing on Grass (minutes/day) . . . . .	9-36
Table 9-29. Number of Times Swimming in a Month in Freshwater Swimming Pool by the Number of Respondents . . . . .	9-37
Table 9-30. Number of Minutes Spent Swimming in a Month in Freshwater Swimming Pool (minutes/month) . . . . .	9-37
Table 9-31. Range of the Average Amount of Time Actually Spent in the Water by Swimmers by the Number of Respondents . . . . .	9-37
Table 9-32. Statistics for 24-Hour Cumulative Number of Minutes Spent Playing Indoors and Outdoors . . . . .	9-38
Table 9-33. Statistics for 24-Hour Cumulative Number of Minutes Spent Sleeping/Napping	9-38
Table 9-34. Statistics for 24-Hour Cumulative Number of Minutes Spent Attending Full Time School . . . . .	9-38
Table 9-35. Statistics for 24-Hour Cumulative Number of Minutes Spent in Active Sports and for Time Spent in Sports/Exercise . . . . .	9-39
Table 9-36. Statistics for 24-Hour Cumulative Number of Minutes Spent in Outdoor Recreation and Spent Walking . . . . .	9-39
Table 9-37. Statistics for 24-Hour Cumulative Number of Minutes Spent in Bathing . . . . .	9-40
Table 9-38. Statistics for 24-Hour Cumulative Number of Minutes Eating or Drinking . . . . .	9-40
Table 9-39. Statistics for 24-Hour Cumulative Number of Minutes Spent Indoors at School and Indoors at a Restaurant . . . . .	9-40
Table 9-40. Statistics for 24-Hour Cumulative Number of Minutes Spent Outdoors on School Grounds/Playground, at a Park/Golf Course, and at a Pool/River/Lake . . . . .	9-41

## LIST OF TABLES (Continued)

Table 9-41. Statistics for 24-Hour Cumulative Number of Minutes Spent at Home in the Kitchen Bathroom, Bedroom, and in a Residence (All Rooms) . . . . .	9-42
Table 9-42. Statistics for 24-Hour Cumulative Number of Minutes Spent Traveling Inside a Vehicle . . . . .	9-43
Table 9-43. Statistics for 24-Hour Cumulative Number of Minutes Spent Outdoors (outside the residence) and Outdoors Other Than Near a Residence or Vehicle, Such as Parks, Golf Courses, or Farms . . . . .	9-43
Table 9-44. Statistics for 24-Hour Cumulative Number of Minutes Spent in Malls, Grocery Stores, or Other Stores . . . . .	9-43
Table 9-45. Statistics for 24-hour Cumulative Number of Minutes Spent with Smokers Present . . . . .	9-44
Table 9-46. Range of Time (minutes) Spent Smoking Based on the Number of Respondents . . . . .	9-45
Table 9-47. Number of Minutes Spent Smoking (minutes/day) . . . . .	9-45
Table 9-48. Gender and Age Groups . . . . .	9-46
Table 9-49. Assignment of At-Home Activities to Ventilation Levels for Children . . . . .	9-47
Table 9-50. Aggregate Time Spent (minutes/day) At-Home in Activity Groups by Adolescents and Children . . . . .	9-48
Table 9-51. Comparison of Mean Time (minutes/day) Spent At-Home by Gender (Adolescents) . . . . .	9-48
Table 9-52. Comparison of Mean Time (minutes/day) Spent At-Home by Gender and Age for Children . . . . .	9-48
Table 9-53. Number of Person-Days/Individuals <sup>a</sup> for Children in CHAD Database . . . . .	9-49
Table 9-54. Number of Hours Per Day Children Spend in Various Microenvironments by Age Average $\pm$ Std. Dev. (Percent of Children Reporting >0 Hours in Microenvironment) . . . . .	9-50
Table 9-55. Average Number of Hours Per Day Children Spend Doing Various Macroactivities <i>While Indoors at Home</i> by Age . . . . .	9-51
Table 9-56. Confidence in Activity Patterns Recommendations . . . . .	9-52
Table 9-57. Summary of Activity Pattern Studies . . . . .	9-59
Table 9-58. Summary of Mean Time Spent Indoors and Outdoors from Several Studies . . . . .	9-60
Table 9-59. Summary of Recommended Values for Activity Factors . . . . .	9-61
Table 10-1. Consumer Products Found in the Typical U.S. Household . . . . .	10-4
Table 10-2. Number of Minutes Spent in Activities Working with or Near Household Cleaning Agents Such as Scouring Powders or Ammonia (minutes/day) . . . . .	10-7
Table 10-3. Number of Minutes Spent Using Any Microwave Oven (minutes/day) . . . . .	10-7
Table 10-4. Number of Respondents Using a Humidifier at Home . . . . .	10-7
Table 10-5. Number of Respondents Indicating that Pesticides Were Applied by the Professional at Home to Eradicate Insects, Rodents, or Other Pests at Specified Frequencies . . . . .	10-8
Table 10-6. Number of Respondents Reporting Pesticides Applied by the Consumer at Home To Eradicate Insects, Rodents, or Other Pests at Specified Frequencies . . . . .	10-8

## LIST OF TABLES (Continued)

Table 11-1. Smoothed Percentiles of Weight (In Kg) by Sex And Age: Statistics From NCHS And Data From Fels Research Institute, Birth to 36 Months . . . . .	11-6
Table 11-2. Body Weights of Children <sup>a</sup> (Kilograms) . . . . .	11-9
Table 11-3. Weight in Kilograms For Males 6 Months-19 Years of Age—number Examine, Mean, Standard Deviation, and Selected Percentiles, by Sex and Age: United States, 1976-1980 . . . . .	11-10
Table 11-4. Weight in Kilograms For Females 6 Months-19 Years of Age - Number Examine, Mean, Standard Deviation, And Selected Percentiles, By Sex And Age: United States, 1976-1980 . . . . .	11-11
Table 11-5. Best-fit Parameters for Lognormal Distributions . . . . .	11-12
Table 11-6. Statistics for Probability Plot Regression Analyses Male's Body Weights 6 Months to 20 Years of Age . . . . .	11-13
Table 11-7. Body Weight Estimates (in kilograms) by Age and Gender, U.S. Population 1988-94 . . . . .	11-14
Table 11-8. Body Weight Estimates (in kilograms) by Age, U.S. Population 1988-94 . . . .	11-15
Table 11-9. Summary of Recommended Values for Body Weight . . . . .	11-16
Table 11-10. Confidence in Body Weight Recommendations . . . . .	11-17
Table 12-1. Expectation of Life at Birth, 1980 to 1993, And Projections, 1995 to 2010 (Years) . . . . .	12-4
Table 12-2. Expectation of Life by Race, Sex, And Age: 1996 . . . . .	12-5
Table 12-3. Confidence in Lifetime Expectancy Recommendations . . . . .	12-6

## LIST OF FIGURES

Figure 1-1. Schematic of Dose and Exposure: Oral Route .....	1-12
Figure 8-1. Schematic of Dose and Exposure: Dermal Route .....	8-2
Figure 8-2. Skin Coverage as Determined by Fluorescence vs. Body Part for Adults Transplanting Plants and for Children Playing in Wet Soils .....	8-32
Figure 8-3. Gravimetric Loading vs. Body Part for Adult Transplanting Plants in Wet Soil and for Children Playing in Wet and Dry Soils .....	8-32
Figure 9-1. Distribution of the Number of Hours per Day Study Children Spent Indoors at Home .....	9-27
Figure 9-2. Distribution of the Number of Hours per Day Study Children Spent Indoors Away from Home .....	9-28
Figure 9-3. Distribution of the Number of Hours per Day Study Children Spent Outdoors at Home .....	9-29
Figure 9-4. Distribution of the Number of Hours per Day Study Children Spent Outdoors Away from Home .....	9-30
Figure 11-1. Weight by Age percentiles for Girls Aged Birth-36 Months .....	11-7
Figure 11-2. Weight by Age Percentiles for Boys Aged Birth-36 Months .....	11-8
Figure 11-3. Mean Body Weights Estimates, U.S. Population, 1988-94 .....	11-18
Figure 11-4. Median Body Weights Estimates, U.S. Population, 1988-94 .....	11-19

## PREFACE

The National Center for Environmental Assessment (NCEA) of EPA's Office of Research and Development (ORD) has prepared this handbook to address factors commonly used in exposure assessments for children. Children are often more heavily exposed to environmental toxicants than adults. They consume more food and water and have higher inhalation rates per pound of body weight than adults. Young children play close to the ground and come into contact with contaminated soil outdoors and with contaminated dust on surfaces and carpets indoors. As another example, exposure to chemicals in breast milk affects infants and young children.

The National Center for Environmental Assessment has published the *Exposure Factors Handbook* in 1997. This document includes exposure factors and related data on children, as well as adults. However, the EPA Program Offices have identified the need to prepare a document specifically for children's exposure factors. The goal of the Child-Specific Exposure Factors Handbook is to fulfill this need.

## FOREWORD

The National Center for Environmental Assessment (NCEA) of EPA's Office of Research and Development (ORD) has five main functions: (1) providing risk assessment research, methods, and guidelines; (2) performing health and ecological assessments; (3) developing, maintaining, and transferring risk assessment information and training; (4) helping ORD set research priorities; and (5) developing and maintaining resource support systems for NCEA. The activities under each of these functions are supported by and respond to the needs of the various program offices. In relation to the first function, NCEA sponsors projects aimed at developing or refining techniques used in exposure assessments.

The *Exposure Factors Handbook* was first published in 1989 to provide statistical data on the various factors used in assessing exposure for the general population; it was revised and published again in 1997. This *Child-Specific Exposure Factors Handbook* is being prepared to focus on various factors used in assessing exposure, specifically for children ages 0 - 19 years old. The recommended values are based solely on our interpretations of the available data. In many situations different values may be appropriate to use in consideration of policy, precedent or other factors.

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